**1a)**

**BALANCING EQUATIONS**

**\_\_\_\_AlCl3 + \_\_\_\_H2 → \_\_\_\_HCl + \_\_\_\_Al**

**Al = Al =**

**Cl = Cl =**

**H = H =**

**2a)( I )**

**BALANCING EQUATIONS**

**\_\_\_\_C2H6 + \_\_\_\_O2 → \_\_\_\_ CO2 + \_\_\_\_H2O**

**C = C =**

**H= H =**

**O = O =**

**2a)(II)**

**BALANCING EQUATIONS**

**\_\_\_\_Fe + \_\_\_\_H2O → \_\_\_\_ Fe2O3 + \_\_\_\_H2**

**Fe = Fe =**

**O= O =**

**H = H =**

**3a)**

**BALANCING EQUATIONS**

**\_\_\_Ca3(PO4)2 + \_\_\_H2SO4 → \_\_\_ CaSO4 + \_\_\_H3PO4**

**Ca = Ca =**

**P = P =**

**O= O =**

**H = H =**

**S = S =**

**4a)**

**BALANCING EQUATIONS**

**\_\_\_H2CrO4 + \_\_\_Al(OH)3 → \_\_\_ Al2(CrO4)3 + \_\_\_H2O**

**H = H =**

**Cr= Cr =**

**O = O =**

**Al = Al =**

**1b)**

**BALANCING EQUATIONS**

**(Using Systems of Equations)**

**\_\_a\_AlCl3 + \_\_b\_H2 → \_c\_\_HCl + \_\_d\_Al**

**Step 1:**

**Al :**

**Cl :**

**H :**

Step 2 : Step 3:

Step 4: Step 5:

Step 6:

**a =**

**b =**

**c =**

**d =**

**\_\_\_\_AlCl3 + \_\_\_\_H2 → \_\_\_\_HCl + \_\_\_\_Al**

**2b)**

**BALANCING EQUATIONS**

**(Using Systems of Equations)**

**\_\_a\_Fe + \_b\_\_H2O → \_\_c\_ Fe2O3 + \_\_d\_H2**

**a =**

**b =**

**c =**

**d =**

**Fe :**

**O :**

**H :**

**\_\_\_\_Fe + \_\_\_\_H2O → \_\_\_\_ Fe2O3 + \_\_\_\_H2**

**3b)**

**BALANCING EQUATIONS**

**(Using Systems of Equations)**

**\_a\_Ca3(PO4)2 + \_b\_H2SO4 → \_c\_ CaSO4 + \_d\_H3PO4**

**Ca :**

**a =**

**b =**

**c =**

**d =**

**P :**

**O:**

**H :**

**S :**

**\_\_\_Ca3(PO4)2 + \_\_\_H2SO4 → \_\_\_ CaSO4 + \_\_\_H3PO4**

**4b)**

**BALANCING EQUATIONS**

**(Using Systems of Equations)**

**\_a\_H2CrO4 + \_b\_Al(OH)3 → \_c\_ Al2(CrO4)3 + \_d\_H2O**

**a =**

**b =**

**c =**

**d =**

**H :**

**Cr:**

**O :**

**Al:**

**\_\_\_H2CrO4 + \_\_\_Al(OH)3 → \_\_\_ Al2(CrO4)3 + \_\_\_H2O**